ESTONIA

COUNTRY PROFILE

**IMPLEMENTATION OF AGENDA 21:
REVIEW OF PROGRESS MADE SINCE THE
UNITED NATIONS CONFERENCE ON
ENVIRONMENT AND DEVELOPMENT, 1992**

**Information Provided by the Government of Estonia to the
United Nations Commission on Sustainable Development
Fifth Session
7-25 April 1997
New York**

United Nations Department for Policy Coordination and Sustainable Development
Division for Sustainable Development
The Information contained in this Country Profile is also available on the World Wide Web, as follows:
http://www.un.org/dpcsd/earthsummit

E/CN.17/1997/Misc.21

97-08196

ESTONIA

This country profile has been provided by:

Name of Ministry/Office: Ministry of the Environment

Date: 22 November 1996

Submitted by: Mr. Rein Ratas, Secretary General
Mr. Andres Kratovits, Counsellor, International Relations Department

Mailing address: Toompuiestee 24, EE0100 Tallinn, Estonia

Telephone: 372 6262 802; 372 626 2841

Telefax: 372 6262 801; 372 626 2845

E-mail: andres@ekm.envir.ee

Note from the Secretariat: An effort has been made to present all country profiles within a common format, with an equal number of pages. However, where Governments have not provided information for the tables appended to Chapters 4 and 17, those tables have been omitted entirely in order to reduce the overall length of the profile and save paper. Consequently, there may be some minor inconsistencies among the formats of the different country profiles.

All statistics are rendered as provided by the respective Governments.

TABLE OF CONTENTS

		Page
ACRONYMS		iii
OVERVIEW		iv
FACT SHEET		vii
AGENDA 21 CHAPTERS		
2.	International cooperation to accelerate sustainable development in developing countries and related domestic policies	1-2
3.	Combating poverty	3-4
4.	Changing consumption patterns	5-8
5.	Demographic dynamics and sustainability	9-10
6.	Protecting and promoting human health	11-12
7.	Promoting sustainable human settlement development	13-14
8.	Integrating environment and development in decision-making	15-16
9.	Protection of the atmosphere	17-18
10.	Integrated approach to the planning and management of land resources	19-20
11.	Combating deforestation	21-22
12.	Managing fragile ecosystems: combating desertification and drought	23-24
13.	Managing fragile ecosystems: sustainable mountain development	25-26
14.	Promoting sustainable agriculture and rural development	27-28
15.	Conservation of biological diversity	29-30
16.	Environmentally sound management of biotechnology	31-32
17.	Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources	33-38
18.	Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources	39-40
19.	Environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products	41-42
20.	Environmentally sound management of hazardous wastes, including prevention of illegal international traffic in hazardous wastes	43-44
21.	Environmentally sound management of solid wastes and sewage-related issues	45-46
22.	Safe and environmentally sound management of radioactive wastes	47-48
23-32.	Major groups	49-54
33.	Financial resources and mechanisms	55-56
34.	Transfer of environmentally sound technology, cooperation and capacity-building	57-58
35.	Science for sustainable development	59-60
36.	Promoting education, public awareness and training	61-62
37.	National mechanisms and international cooperation for capacity-building in developing countries	63-64
38.	International institutional arrangements	65
39.	International legal instruments and mechanisms	66
40.	Information for decision-making	67-68

ACRONYMS

APELL	Awareness and Preparedness for Emergencies at Local Level
CFC	chlorofluorocarbon
CGIAR	Consultative Group on International Agriculture Research
CILSS	Permanent Inter-State Committee on Drought Control in the Sahel
EEZ	exclusive economic zone
ECA	Economic Commission for Africa
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ELCI	Environmental Liaison Centre International
EMINWA	environmentally sound management of inland water
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GEMS/WATER	Global Water Quality Monitoring Programme
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Pollution
GIPME	Global Investigation of Pollution in Marine Environment (UNESCO)
GIS	Geographical Information System
GLOBE	Global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
GSP	generalized system of preferences
HIV	human immunodeficiency virus
IAEA	International Atomic Energy Agency
IAP-WASAD	International Action Programme on Water and Sustainable Agricultural Development
IARC	International Agency for Research on Cancer
IBSRAM	International Board of Soil Resources and Management
ICCA	International Council of Chemical Associations
ICES	International Council for the Exploration of the Sea
ICPIC	International Cleaner Production Information Clearing House
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
IEEA	Integrated environmental and economic accounting
IFAD	International Fund for Agricultural Development
IGADD	Intergovernmental Authority for Drought and Development
IGBP	International Geosphere-Biosphere Programme (ICSU)
IGBP/START	International Geosphere-Biosphere Programme/Global Change System for Analysis, Research and Training
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
INFOTERRA	International Environment Information system (UNEP)
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	integrated pest management
IRPTC	International Register of Potentially Toxic Chemicals
ITC	International Tin Council
ITTO	International Tropical Timber Organization

IUCN	International Union for Conservation of Nature and Natural Resources
MARPOL	International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PGRFA	plant genetic resources for agriculture
PIC	prior informed consent procedure
SADCC	South African Development Co-ordination Conference
SARD	sustainable agriculture and rural development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNU	United Nations University
WCP	World Climate Programme (WMO/UNEP/ICSU/UNESCO)
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WWF	World Wide Fund for Nature (also called World Wildlife Fund)
WWW	World Weather Watch (WMO)

OVERVIEW

1. The Estonian Parliament has ratified the UN Framework Convention on Climate Change and the Biodiversity Convention in 1994. For the implementation of these conventions, interministerial working groups have been established involving civil servants, scientists, and NGOs. National reports/communications have been published. These reports are based on broad scientific research. Principles of these conventions have been included into several national legal acts, as well as national and regional action plans.

2. Agenda 21 has been introduced to:

- members of the Parliament;
- members of the Government;
- civil servants and local authorities;
- entrepreneurs;
- the public

A popular edition of the Agenda 21 has been published in Estonian.

3. In February 1995, the Parliament passed the Act on Sustainable Development. In accordance with this Act:
- National Environmental Strategy has been worked out;
- elaboration of a National Environmental Action Plan has begun;
- national forestry policy is completed;
- critical and usable reserves of renewable national resources have to be established and adopted by the Government (in case of peat it has been done already).

4. For the implementation of the Act on Sustainable Development and principles of Agenda 21, the following bodies have been established:

4.1. In November 1996 the high level Commission on Sustainable Development (27 members):
Chairman - Prime Minister
Vice-Chairmen - Minister of the Environment; Minister of the Economy
Members - representatives of the Ministries of Education, Environment, Economy, Transport and communication, Agriculture, Social Affairs; members of the Parliament; representatives of scientific society

4.2. Executive Commission of the Ministry of the Environment;

4.3. Steering Commission in the Ministry of the Environment.

UNCSD - NATIONAL LEVEL COORDINATION STRUCTURE OF AGENDA 21 ACTIONS
(Fact Sheet)

ESTONIA

1. Key National Sustainable Development Coordination Mechanism(s,/Council(s).
National Commission on Sustainable Development

Contact point (Name, Title, Office): Mr. Rein Ratas, Secretary General, Ministry of the Environment of the Republic of Estonia

Telephone: (372) 6262 804 / 372 626 2841 **Fax:** (372) 6262 801 **e-mail:** min@ekm.envir.ee

Mailing address: 24 Toompuiestee Street
EE0100 Tallinn
Estonia

2. Membership/Composition/Chairperson: Chairman: Mr. Tiit Vähi, Prime Minister
Deputy Chairman: Mr. Villi Reiljan, Minister of the Environment; Deputy Chairman: Mr. Jaak Leiman, Minister of Economic Affairs.

2a. List of ministries and agencies involved: National Commission on Sustainable Development - 28 members.

2b. Names of para-statal bodies and institutions involved, as well as participation of academic and private sectors: Academy of Science, Tartu University, Tallinn Technical University, University of Agriculture

2c. Names of non-governmental organizations: Estonian Green Movement, Estonian Green Cross, Nature Protection Society

3. Mandate role of above mechanism/council: Coordination.

4. If available, attach a diagram (organization chart) showing national coordination structure and linkages between ministries:

Submitted by
(Name): Mr. Rein Ratas **Signature:** Signed.

Title: Secretary General **Date:** 21 March 1997

Ministry/Office: Ministry of the Environment

Telephone: 372 6262 804 **Fax:** 372 6262 801 **e-mail:** min@ekm.envir.ee

ESTONIA

AGENDA 21 CHAPTER 2: **INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES (with special emphasis on TRADE)**

NATIONAL PRIORITY:	
STATUS REPORT:	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS					

AGENDA 21 CHAPTER 3: COMBATING POVERTY

NATIONAL PRIORITY:	
STATUS REPORT: • Focus of national strategy • Highlight activities aimed at the poor and linkages to the environment	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**
NB: Developed countries, where domestic poverty alleviation is not a major concern may wish to briefly describe their position regarding global poverty alleviation.

STATISTICAL DATA/INDICATORS

	1985	1991	1993	Latest 199_	
Unemployment (%)		0.1	1.9		
Population living in absolute poverty					
Public spending on social sector %					
Other data					

AGENDA 21 CHAPTER 4: CHANGING CONSUMPTION PATTERNS

NATIONAL PRIORITY:

STATUS REPORT:

- **National policy objectives/focus**

- **National targets**

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

	1985	1990	1992	1994
GDP per capita (current US$)	. 3,792	7,566	728	6,667[*b]
Real GDP growth (%)	-7.0	-0.4	-5.2	-3,2
Annual energy consumption per capita (Kg. of oil equivalent per capita)			3,751	3,500[a]
Motor vehicles in use per 1000 inhabitants	113.9	154.0	209.2[a]	305.7[b]

[a] 1993 [b] = 1996 [*] in prices and purchasing power in 1991

Government policies affecting consumption and production.

1. Goals and Agents (Stakeholders)

Indicate with a (✓) those agents which your Governments policies are meant most to influence.

Agents / Goals	Producers	Local authorities	Central Government	Households	Civil society
Material efficiency	✓				
Energy efficiency:					
Transport		✓	✓		
Housing		✓	✓	✓	
Other					
Waste:					
Reduce	✓	✓	✓	✓	
Reuse	✓	✓			
Recycle	✓	✓	✓		

Comments:

2. Means & Measures and Agents (Stakeholders)

Indicate with an (R) those agents who assume primary responsibility for any of the policy measures indicated; indicate with an (I) the agents for which the impact is expected to be especially significant.

Means & Measures / Agents	Producers	Local authorities	Central Government	House-holds	Civil Society
Improving understanding and analysis					
Information and education (e.g., radio/TV/press)		R	R	I	I
Research	I		R		
Evaluating environmental claims			R		I
Form partnerships			R		
Applying tools for modifying behaviour					
Community based strategies	I	R	R	I	I
Social incentives/disincentives (e.g., ecolabelling)	I		R		
Regulatory instruments	I		R		I
Economic incentives/disincentives	I	R	R		
Voluntary agreements of producer responsibility for aspects of product life cycle	I		R		
Provision of enabling facilities and infrastructure (e.g., transportation alternatives, recycling)			R		
Procurement policy	I		R		
Monitoring, evaluating and reviewing performance					
Action campaign		R	R		
Other (specify)					

Comments:

AGENDA 21 CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

NATIONAL PRIORITY:

STATUS REPORT:

☐ Check the appropriate boxes below:

• Governments view on population growth	☐ Too high	☐ Too low	☐ Satisfactory	
• Governments view on fertility level	☐ Too high	☐ Too low	☐ Satisfactory	
	To lower the rate	**To maintain status quo**	**To raise the rate**	
• Governments intervention on population growth	☐	☐	☐	
• Governments view on intervention on fertility level	☐	☐	☐	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

	1990	1993	1995	
Population (Thousands) mid-year estimates	1,571	1,517	1,5	
Annual rate of increase (1990-1993)		-1.2		
Surface area (Km^2)		45,100		
Population density (people/Km^2)		34		
Other data				

AGENDA 21 CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

NATIONAL PRIORITY:

STATUS REPORT: The Government of Estonia has enumerated the following objectives for this chapter : the integration of environment and development at the policy, planning and management level providing an effective legal and regulative framework; development and promotion of the integrated provision of environmental infrastructure, optimization of the existing infrastructure for the purposes of necessary specialized environmental health services; improvement of the technical capabilities for the monitoring, assessment and management of environmental risks to health; reducing differences in urban and rural health needs and assessment and evaluation of the main causes of the premature death of the population; drafting a national strategy for development of qualified human resources; capacity-building for decision makers on different levels; and assessment and identification of the special needs of vulnerable groups.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Government of Estonia has provided a legal framework for dividing the level of responsibilities and tasks among national, community and municipal levels.

2. **Capacity-Building/Technology Issues:** Institutions necessary for the training of working environmental health specialists have been created; health education has been introduced to educational institutions; and new strategies for the training of environmental health and public health specialists are being developed.

3. **Major Groups:** All vulnerable groups - children, youth, women - are subject to high health risk.

4. **Finance:** As a rule, the prevention of environmental risk factors is being financed by the agent of the risk. When it is impossible to identify any specific risk agent, the expenses are accordingly borne by state or municipalities.

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

	1980	1990	1994	
Life expectancy at birth				
Male		64.0	61.07	
Female		74.64	73.05	
Average		69.74	66.93	
Infant mortality (per 1000 live births) at least 500 g birthweight		12	14.5	
Maternal mortality rate (per 100000 live births)		31	56.4	
Access to safe drinking water (% of population)			95 - 98	
Access to sanitation services (% of population)			~90	
Other data				

AGENDA 21 CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT: The decades from the 1960s to the 1980s were characterized by extensive construction in towns and in rural areas of standard large-panel apartment buildings for up to 130,000 people. Currently, the main activity in this area is the planning and construction of "inhabitant-friendly" housing areas and renovation of the large panel buildings of the 1960s. Privatization of housing areas is limited due to the poor conditions of living quarters and to the lack of financial resources of potential buyers.

Soviet policy resulted in rapid growth in the urban population and largely unpopulated rural areas. Abandoned villages are now being revived since farms are being returned to their former owners. The population in large towns is also decreasing because of migration and the departure of the foreign military.

Sustainable and democratic planning methods are being enhanced through the training of planning experts. Estonia has received "know-how" support from the Nordic countries, Germany and the Netherlands.

Energy and transport systems are comparatively well-established. There are problems, however, with their maintenance.

In order to create an environment supporting the sustainable use of natural resources, relatively small enterprises have been established. The privatization of large construction companies has been initiated and foreign investors have been given priority.

Local authorities are responsible for handling the population's social problems (e.g. housing). One obstacle to the decentralization of management is the lack of expertise within local government.

The financial resources of local governments are limited. Thus, the implementation of the anticipated measures has not been fully satisfactory, e.g. purification equipment for sewage has not been installed to anticipated levels.

Cross-Sectoral Issues

1. Decision-Making Structure: New legislation - the Constitution of 1992, the Land Law, the Property Rights Law, the Law on Privatization, etc. - is regulating issues related to human settlements. They need to be improved since all essential reforms have not yet been fully implemented.

2. Capacity-Building/Technology Issues: No information

3. Major Groups: No information

4. Finance: In order to renovate housing stock, both national and international funding (e.g. through loans) is necessary. Approximately US$ 722 million of external funding will be required in order to implement all planned activities. The external funding resources are: the Nordic Council of Ministers, the International Federation for Housing and Planning (IFHP), the Nordic Investment Bank (NIB), the European Bank for Reconstruction and Development (EBRD) and the United Nations Economic Commission for Europe.

5. Regional/International Cooperation: As an economy in transition, Estonia needs external help in reconstructing and redesigning its economy and structures. The international organizations and funding mechanisms with which Estonia cooperates are described above.

STATISTICAL DATA/INDICATORS

	1990	1995	
Urban population in % of total population	71.8	73.1	
Annual rate of growth of urban population (%)	0.8	-0.2	
Largest city population (in % of total population)	31.6		
Other data			

AGENDA 21 CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

(See pages vii and viii at the beginning of the profile)

NATIONAL PRIORITY:

STATUS REPORT: As an economy in transition, Estonia's focus has been on property and land reform during recent years. Both the Government and the Parliament have concentrated on the preparation of laws and implementation of reforms. Recent years have not been very favorable for promoting environmental policy. Nevertheless, at the beginning of 1994, the Ministry of Environment created a framework law of sustainable development which has been ratified by Parliament. The law is intended to state the main principles of sustainable development and to establish responsibilities on the enforcement of various activities, which include: 1) the obligation of the government to develop master plans for the most important branches of the economy (e.g. energy, transport, and agriculture); and 2) the obligation of the government and local authorities to organize physical planning in regions and municipalities. Environmental protection considerations must also be part of any national or regional plan.

The Ministry of the Environment was reorganized to take over responsibilities for national branches of some former Soviet organizations. It governs all aspects of society which are related to the environment. Inter-ministerial committees on the Framework Convention of Climate Change and the Convention of Biological Diversity have been established. The National Council of Sustainable Development and the Joint Council of Nature Societies on Sustainable Development have also been established.

Some scientific institutes are specialized in general problems of sustainable development.

The environmental monitoring system is being reorganized.

In 1995, the act on sustainable development was enacted by Parliament. On 12 November 1996, the Government established the high-level commission on sustainable development, with the Prime Minister as a head of the commission. The Commission includes several ministers, members of the Parliament, Scientists, NGOs and other outstanding persons.

Cross-Sectoral Issues

1. **Decision-Making Structure (please also refer to the fact sheet):** Please refer to "Status" above

2. **Capacity-Building/Technology Issues:** No information

3. **Major Groups:** No information

4. **Finance:** No information

5. **Regional/International Cooperation:** Please refer to "Status" above

AGENDA 21 CHAPTER 9: PROTECTION OF THE ATMOSPHERE

NATIONAL PRIORITY:

STATUS REPORT:

The Montreal Protocol and its Amendments

- Montreal Protocol (1987) signed in 1996
- London Amendment (1990) signed in 19--
- Copenhagen Amendment (1992) signed in 19--
- The latest report(s) to the Montreal Protocol Secretariat were prepared in 1995

United Nations Framework Convention on Climate Change

- UNFCCC was ratified after 1 July 1992.
- The latest report to the UNFCCC Secretariat was submitted in 1995.

Additional comments relevant to this chapter

Estonia signed the Framework Convention in Rio in June 1992. The Parliament of Estonia ratified the Convention on May 11, 1994 and the Act on Ratification of the UNFCCC was declared by the President on May 26, 1994. The Convention entered into force for Estonia on October 28, 1994. An interministerial committee for the implementation of the Convention was established in January 1995.

Estonia presented its first national communication to the COP 1 in March 1995. In 1996, the In-depth Review Team, composed of the Secretariat of the UNFCCC, visited Estonia in order to review National Communication and gather additional information on the implementation of the Convention. The Report of the results of this visit is expected to be ready by the end of 1996.

Several ministries and institutions have contributed to the National Communication, including the Ministry of Agriculture, Ministry of Economy, Department of Energy, Ministry of Transport and Communication, Ministry of Foreign Affairs, Institute of Ecology, and Environmental Information Centre to the Ministry of the Environment. Estonia was assisted in the preparation of its communication by the United States in the framework of the programme "US Support for Country Studies to Address Climate Change". The work started in October 1994 and focuses on greenhouse gas inventories, vulnerability and adaptation to climate change, mitigation, national strategies and public education. It is coordinated by the Institute of Ecology.

Currently, Estonia is also participating in two UNEP/GEF Projects: "Country Case Studies Programme on Climate Change Impacts and Adaptation Assessment, phase I", and "Economics of Greenhouse Gases Limitation, phase I".

The Ministry of Environment has the prime responsibility for climate change related matters. An interministerial committee on the implementation of the Convention was established in January 1995. It includes representatives from the Ministries of economy, environment, energy, agriculture, foreign affairs and transport, as well as several individual scientists.

TPES stood at 6.78 Mtoe in 1992, down 33% from 1990. The decline in energy supply was due to a combination of reduced demand for energy as a result of the economic recession and shortages of imported supplies.
Estonia's domestic energy resources consist of oil shale, peat and wood. Oil shale, a sedimentary rock which decomposes to yield oil when heated, is the country's main energy resource, making up more than half of TPES in 1992. It is mined on a large, although declining scale - for production fell from 5.0 Mtoe 4.2 Mtoe between 1990 and 1992. It is used mainly in electricity generation, processing industry and cement production. Oil shale based electricity production accounted for 90% of Estonia's electricity output.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The Ministry of the Environment, Interministerial Committee on Climate Change are primarily responsible for the protection of the atmosphere in Estonia.

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:** Both NGOs and the scientific community participate in decision-making in this area.

4. **Finance:** Mainly international

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1994
CO_2 emissions (eq. million tons)		39.59	23.27
SO_x *	0.27	0.24	0.14
NO_x *		0.09	0.05
CH_4 *		0.32	0.19
Consumption of ozone depleting substances (Tons)			$0.12X10^{-3}$
Expenditure on air pollution abatement in US$ equivalents (million)			
Other data			

AGENDA 21 CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

NATIONAL PRIORITY:

STATUS REPORT: Over the 1945-1989 period, plans for all Estonian towns and rural settlements were produced, as well as district and national plans.

With the re-establishment of independence in Estonia, revision of all the plans proved necessary and as a result, decisions were made on their validity or annulment. The objective of the revision was to create an awareness of planning problems on all administrative levels and to exert pressure on local governments to deal with development problems.

Planning and building in Estonia is based upon the Planning and Building Act, enforced in 1995. Local governments have revised the existing plans and, proceeding from legal acts, reached the following decisions:

- 19 municipalities and 4 towns have new legally appropriate plans,
- 26 municipalities and 11 towns are in the process of producing plans,
- 315 small towns and 36 towns maintain revised plans,
- 40 earlier plans are subject to invalidation.

For the dissemination of skills and knowledge required for the production of comprehensive plans in compliance with principles of sustainable development and democracy, the Ministry of Environment, in cooperation with municipalities and foreign partners (Nordic countries), organizes the work of pilot projects. The overall objective is to complete up-to-date comprehensive plans for all municipalities by the year 2005.

The production of country plans has been initiated in each of the 15 counties. According to the legal acts, these must be completed by the year 1998.

Work on the national plan "ESTONIA 2010" was initiated in cooperation with county governments and ministries in 1995 and is envisaged to last for three years.

The first phase of the joint project of all the countries around the Baltic "Vision & Strategies around the Baltic Sea 2010" (VASAB 2010) was completed as an international plan in 1994. In the second phase of the joint project, the Estonian Ministry of Environment is participating in five theme projects. Through VASAB 2010, a continuous and integrated planning process in cooperation with Baltic countries has evolved.

In agreement with valid legislation, comprehensive planning for municipalities and towns is generally financed by local government. County and national planning schemes are financed by the state.

Cross-Sectoral Issues

1. Decision-Making Structure: New legal acts (e.g. Planning and Building Act, 1995; Local Government Act, 1994; Land Reform Act, 1996) and planning regulations and norms (e.g. order of design permit issue, 1996; norms of Estonian street design, draft) have been implemented.

2. Capacity-Building/Technology Issues: 23 local governments have new legally appropriate plans; 37 local governments are in the process of producing new plans; almost 330 plans of different rural settlements and towns are valid with revisions; almost 40 existing plans have been cancelled.

3. Major Groups: Local and county governments, as well as various interest groups (NGOs), are active in this area.

4. Finance: Planning in rural municipalities and towns is financed by local governments. Pilot projects are supported from the state budget. Foreign aid has been available for training and advanced training (Finnish Ministry of Environment, Swedish SIDA, IFHP, PHARE).

Financing has been insufficient for planning. County governments would require approximately 200-300 000 EEK per year from the state budget for targeted financing. Rural municipalities and towns would require targeted planning support of approximately 200-400 000 EEK per county annually (1 USD = 12,2 EEK).

5. Regional/International Cooperation: Examples of cooperation include the programmes, Vision & Strategies around the Baltic Sea 2010; Tampere-Helsinki-Tallinn-Riga Development Corridor; Via Baltica; Larger Baltic Islands Development; Baltic Compendium of Planning Legislation; Network of Cities; Opening Estonian Coastal Zone for Tourism; various county, urban and municipal planning schemes with involvement of foreign experts and instructors; joint project of the border town Valga-Valka with ECOS Overture (EU) and with Finland and Sweden; municipal cooperation, i.e. Räpina town and Räpina municipality, planning cooperation between Pepsi Region municipalities, etc.

AGENDA 21 CHAPTER 11: COMBATING DEFORESTATION

NATIONAL PRIORITY:

STATUS REPORT: In the early 1990s, the Estonian forestry sector was organized largely on the basis of administrative structures inherited from the Soviet era. The adjustment to a market economy and new environmental standards proved to be slow and difficult, and gradually it became apparent that a thorough overhaul of the sector was needed. The principal issues were related to organizing public forest administration, establishing an appropriate balance between forest production and conservation, and providing support to private forest owners. In order to accelerate the development in the forest sector and to improve the basis for legislative reforms, the Ministry of Environment decided in early 1995 to launch the Estonian Forestry Development Programme, which includes the task of formulating a National Forest Policy. The objectives set for the policy formulation process were :(i) to define the general objectives for the development of the forest sector, and (ii) to determine the action to be taken by the public sector in order to reach these objectives. The process has been under way since September 1995.

Working Groups have been the main vehicle for examining various issues. Their members represent all main interest groups including the Forestry Department, various Government Ministries, Forest Industries, Private Forest Owners and non-governmental organizations. The main task of the Working Groups has been to identify and analyze suitable development alternatives in their special field. To support the analysis, a number of special studies have been carried out. Based on recommendations of the Working Groups, the National Coordinator's Office prepared the first draft of the Forest Policy.

The first draft of the Policy was submitted to the Steering Committee, which is an official body appointed by the Government. The Committee is headed by the Minister of Environment, and the members include civil servants from key ministries as well as representatives of the private sector and non-governmental organizations. The Committee produced the second revised draft focusing on issues requiring political decision-making, and will later submit it for the Government's consideration.

The second revised draft will be submitted to the Government for review and modification as required. When formulating the final draft, the Government will draw on public input and debate on the revised draft of the Forest Policy. The final draft will be approved as the National Forest Policy, thus constituting the basis for formulating new legislation as well as development and investment programmes for the forest sector. It is anticipated that the National Forest Policy will be approved in 1997.

Cross-Sectoral Issues

1. **Decision-Making Structure:** Ministry of the Environment and Forestry Board are the institutions primarily responsible for sustainable forestry in Estonia.

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:** Helsinki Process, ECE/FAO

STATISTICAL DATA/INDICATORS

	1985	1990	1996	
Forest Area (Km^2)	21,3	21,3	24,4	
Protected forest area	28%	28%		
Roundwood production (solid volume of roundwood without bark in mill m^3)	3,1	3,2	3,3	
Deforestation rate (Km^2/annum)	-	-	-	
Reforestation rate (Km^2/annum)	3000 ha	3500	3500	
Other data				

AGENDA 21 CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

NATIONAL PRIORITY:

STATUS REPORT:

International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa

Each party shall file reports on implementation with the Conference of Parties, as often and in the form to be determined. Parties are to report on development of national action programmes. The Conference shall assist affected developing countries to make reports.

- Convention ☐ signed in 19-- ☐ ratified in 19--

- The latest report to the Secretariat of the Convention was prepared in 19--.

Additional comments relevant to this chapter

Cross-Sectoral Issues	
1. Decision-Making Structure:	
2. Capacity-Building/Technology Issues:	
3. Major Groups:	
4. Finance:	
5. Regional/International Cooperation:	

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 199_	
Land affected by desertification (Km^2)				
Other data				

AGENDA 21 CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

NATIONAL PRIORITY:	
STATUS REPORT:	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT: According to the Act on Sustainable Development, promotion of sustainable agriculture and rural development is a social priority. This is also stressed in the National Report on Biodiversity.

Cross-Sectoral Issues

1. Decision-Making Structure: Parliament, the Ministry of Agriculture, and the Ministry of the Environment are the institutions that are primarily responsible for sustainable agriculture and rural development policy in Estonia.

2. Capacity-Building/Technology Issues: Scientific Institutes, the Ministry of Agriculture, and the Information Center of the Ministry of the Environment are the major actors in this area.

3. Major Groups:

4. Finance: State budget, Environmental Fund, and Forest Capital are the primary sources of financing.

5. Regional/International Cooperation: Included are Baltic Cooperation, Cooperation with the European Union and the Council of Europe

STATISTICAL DATA/INDICATORS

	1985	1990	1995	
Agricultural land (Km^2)	14,788	13,677	14,500	
Agricultural land as % of total land area	32,7	30,2	32	
Agricultural land per capita	0,0097	0,0087	0,0098	
	1990	**1992**	**1995**	
Consumption of fertilizers per Km^2 of agricultural land as of 1990 * Mineral fertilizers (NPK total, Kg) * Organic fertilizers (Kg)	 14,46 582,3	 12,39 341,9	 1,88 240,3	
Other data				

AGENDA 21 CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

NATIONAL PRIORITY:

STATUS REPORT:

Convention on Biological Diversity

Parties are to develop national strategies, plans and programmes for sustainable use and conservation of biodiversity and integrate them into general development plans.
Parties shall identify, monitor and maintain data on components of biodiversity.
Parties shall introduce appropriate procedures requiring EIAs for projects likely to have significant adverse effects on biological diversity.
Parties shall submit reports on measures which it has taken for the implementation of the Convention, at intervals to be determined.

- Convention [✓] signed in 1992 [✓] ratified after 1 July 1992
- Latest report submitted in 1996.

Convention on International Trade in Endangered Species of Wild Fauna and Flora

- Convention ratified after 1 July 1992.
- Latest report submitted in 1996.

Additional comments relevant to this chapter: According to the Government, one of most important goals in this area was to draft and pass the Act on Sustainable Development which was approved by the Riigikogu on February 22, 1995. The Act states, "Preservation of biological diversity shall be guaranteed through a national programme and an action plan approved by the Government of the Republic of Estonia, the implementation of which shall be financed from the national budget..." (Art.9).

In the autumn of 1995, two important national policy papers were drafted: the Estonian Environmental Strategy and the Estonian Forest Policy. Both of them included a biodiversity section and the draft versions of the documents position the biodiversity issue rather highly. Both documents were finished by the Fall 1996 and presented to the Government for approval.

As for the implementation of the Convention on Biodiversity at the national level, contacts have been promoted between authorities in different sectors which deal with issues related to biodiversity: e.g., agriculture, fisheries, forestry, and scientific institutions. Various activities have been implemented in those sectors in regards to the *in situ* and *ex situ* conservation of species, the maintenance and breeding of local animal breeds and cultivars of plants, and spatial and land use planning in areas with protected landscapes, etc. Existing infrastructure includes a well-developed network of protected areas, databases concerning local cultivated plant species and animal breeds, seed banks of forest trees, gene banks established for different purposes, specific programmes for species protection managed by botanical gardens and the zoo, and national monitoring programmes concerning fisheries, forests, and biological resources in general. According to the Government, all of the above-mentioned activities would have been impossible without learning from international experience and participating in processes at the international level.

The monitoring system, based on state finances, was established in Estonia to monitor the use of natural resources (forest, fish, mineral resources, water), as well as for monitoring protected and endangered species and communities.

The National Biodiversity Strategy, approved by the GEF, will help Estonia establish a comprehensive cross-sectoral framework which can be used in the future for *inter alia* project identification and acquisition of funding for activities aimed at the preservation and sustainable management of biodiversity. The document will also be important for the preparation of background documents for an integrated biodiversity management planning process, the promotion of public involvement and participation in this process, as well as encourage local initiative.

Cross-Sectoral Issues

1. Decision-Making Structure: The Governmental Commission on Biodiversity and Ministry of the Environment are the institutions primarily responsible for the conservation of biodiversity in Estonia. The Government of Estonia established a special Governmental Commission to deal with issues related to biological diversity, and developed a concrete agenda for its implementation. The ministerial *ad hoc* group on sustainable development - the Committee on Sustainable Development - has been involved in issues related to the Convention of Biological Diversity since 1993. The main task of the group has been to influence government policies towards greater consideration of sustainable development principles in national policy. In 1995, Estonia also established a national ad hoc Task Group on CBD.

2. Capacity-Building/Technology Issues: UNEP supported a Biodiversity Country Study project which is currently being finalized. The project will define "basic needs" for the effective conservation and rational use of national biodiversity at a desired level, estimate the costs and benefits related to these "basic needs", as well as define the necessary support measures required to fulfill them, and provide the foundation for the preparation and implementation of a National Biodiversity Strategy and Action Plan.

The project, "Implementation of the Act on Sustainable Development and the Biodiversity Convention in Estonia", funded by the EU LIFE programme, provides the possibility to evaluate ways of integrating the requirements of the Convention into the management plans of protected areas.

3. Major Groups:

4. Finance: Funds are derived from the State Budget, the Environmental Fund, and the Fisheries Fund. The application for support for the preparation of the National Biodiversity Strategy, Action Plan (NBSAP), and First National Report to the Convention on Biological Diversity was approved by the GEF.

5. Regional/International Cooperation: A very significant step in implementing the requirements of the Convenntion was the signing of the Association Agreement between Estonia and the European Union in 1995. This led, inter alia, to a resolution to develop legislation on biotechnology and GMO in 1997.

Among others, cooperation with UNEP, the World Bank, and a number of bilateral partners has been of high importance. Among the most important initiatives are the UNEP-supported Biodiversity Country Study project (see above); the Keypoints for National Biodiversity Action Plan for Estonia, a triple project for the three Baltic countries funded by the World Bank; the project, "Implementation of the Act on Sustainable Development and the Biodiversity Convention in Estonia," funded by EU LIFE; and the support from the GEF for preparation of Estonia's National Biodiversity Strategy, Action Plan and First National Report to the Convention on Biological Diversity.

Also important have been the international seminars "Environmental Conventions and the Baltic States" held in Tabasalu, Estonia in 1993, and Parnu, Estonia in 1995 organized by the Stockholm Environment Institute - Tallinn, and the workshop on the status and implementation of the CITES Convention and CBD in the Baltic States, organized by the Ministry of the Environment of Estonia and the Baltic Environmental Forum (June 1996); and the UNEP Workshop on the Practical Implementation of the Convention on Biological Diversity in the Baltic Countries held in Tallin on October 16-19, 1994.

STATISTICAL DATA/INDICATORS

	1992	1996
Protected area as % of total land area	12%	12%
	1990	**1996**
Number of threatened species	500	500
Other data: 4 natural parks, 60 nature reserves, 200 landscape reserves, 1 biosphere reserves.		

AGENDA 21 CHAPTER 16: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY

NATIONAL PRIORITY:	
STATUS REPORT:	

Cross-Sectoral Issues

1. Decision-Making Structure:

2. Capacity-Building/Technology Issues:

3. Major Groups:

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 17: **PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES**

NATIONAL PRIORITY:

STATUS REPORT:

The UN Convention on the Law of the Sea

☐ Signed in 19-- ☐ Ratified in 19--

See also the attached tables on the next pages.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

		1980	1990	1995	
Catches of marine species (metric tons)	ton	300,000	355,000	135,000	
Population in coastal areas		990,000	1,110,000	1,030,000	
Population served by waste water treatment (% of country's total population)			85	85	
Discharges of oil into coastal waters (metric tons)	ton		322	93	
Releases of phosphate into coastal waters (metric tons)	P total, ton		792	321	
Releases of nitrate into coastal waters (metric tons)	N total, ton		7,530	3,500	
Other data BOD,			38,000	4,480	

Chapter 17 (Oceans) Continued:

Check the boxes in the column below left:
For level of importance use:
***** = very important**
**** = important**
*** = not important**
N = not relevant

Check the boxes in the column below right:
For level of implementation use:
***** = fully covered**
**** = well covered - gaps being addressed**
*** = poorly covered**
O = not covered
N = not relevant

TABLE I. THE FOLLOWING ACTIVITIES HAVE BEEN CONSIDERED BY THE APPROPRIATE COORDINATING MECHANISM FOR INTEGRATED MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE AREAS AND THEIR RESOURCES.

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	a. Preparation and implementation of land and water use and siting policies.	*
**	b. Implementation of integrated coastal and marine management and sustainable development plans and programmes at appropriate levels.	*
*	c. Preparation of coastal profiles identifying critical areas including eroded zones, physical processes, development patterns, user conflicts and specific priorities for management.	*
**	d. Prior environmental impact assessment, systematic observation and follow-up of major projects, including systematic incorporation of results in decision-making.	*
**	e. Contingency plans for human induced and natural disasters.	*
**	f. Improvement of coastal human settlements, especially in housing, drinking water and treatment and disposal of sewage, solid wastes and industrial effluents.	*
*	g. Periodic assessment of the impacts of external factors and phenomena to ensure that the objectives of integrated management and sustainable development of coastal areas and marine environment are met.	*
	h. Conservation and restoration of altered critical habitats.	*
**	I. Integration of sectoral programmes on sustainable development for settlements, agriculture, tourism, fishing, ports and industries affecting the coastal areas.	*
**	J. Infrastructure adaptation and alternative employment.	*
**	K. Human resource development and training.	*
**	L. Public education, awareness and information programmes.	*
**	M. Promoting environmentally sound technology and sustainable practices.	*
**	N. Development and simultaneous implementation of environmental quality criteria.	*

TABLE II. TECHNOLOGY (MARINE ENVIRONMENT)

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
**	A. Apply preventive, precautionary and anticipatory approaches so as to avoid degradation of the marine environment, as well as to reduce the risk of long-term or irreversible adverse effects upon it.	*
**	B. Ensure prior assessment of activities that may have significant adverse impacts upon the marine environment.	*
**	C. Integrate protection of the marine environment into relevant general environmental, social and economic development policies.	*
**	D. Develop economic incentives, where appropriate, to apply clean technologies and other means consistent with the internalization of environmental costs, such as the polluter pays principle, so as to avoid degradation of the marine environment.	*
**	E. Improve the living standards of coastal populations, particularly in developing countries, so as to contribute to reducing the degradation of the coastal and marine environment.	*
**	F. Effective monitoring and surveillance within the exclusive economic zone (EEZ) of fish harvesting and transportation of toxic and other hazardous materials.	*

TABLE III. SEWAGE RELATED ISSUES

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
*	A. Sewage related problems are considered when formulating or reviewing coastal development plans, including human development plans.	*
**	B. Sewage treatment facilities are built in accordance with national policies.	**
**	C. Coastal outfalls are located so as to maintain acceptable level of environmental quality and to avoid exposing shell fisheries, water intakes and bathing areas to pathogens.	**
**	D. The Government promotes primary treatment of municipal sewage discharged to rivers, estuaries and the sea, or other solutions appropriate to specific sites.	**
**	E. The Government supports the establishment and improvement of local, national, subregional and regional, as necessary, regulatory and monitoring programmes to control effluent discharge. Minimum sewage effluent guidelines and water quality criteria are in use.	**

TABLE IV. OTHER SOURCES OF MARINE POLLUTION, THE GOVERNMENT HAS:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
	A. Established or improved upon, as necessary, regulatory and monitoring programmes to control emissions, including recycling technologies.	**
**	B. Promoted risk and environmental impact assessments to help ensure an acceptable level of environmental quality.n	*
**	C. Promoted assessment and cooperation at the regional level, where appropriate, with respect to the input of point source pollutants from the marine environment.	N
N	D. Taken steps to eliminate emissions or discharges of organohalogen compounds from the marine environment.	*
**	E. Taken steps to eliminate/reduce emissions or discharges or other synthetic organic compounds from the marine environment.	*
**	F. Promoted controls over anthropogenic inputs of nitrogen and phosphorous that enter coastal waters where such problems as euthrophication threaten the marine environment or its resources.	*
**	G. Taken steps to develop and implement environmentally sound land-use techniques and practices to reduce run-off to water courses and estuaries which would cause pollution or degradation of the marine environment.	*
**	H. Promoted the use of environmentally less harmful pesticides and fertilizers and alternative methods for pest control, and considered the prohibition of those found to be environmentally unsound.	*
**	I. Adopted new initiatives at national, subregional and regional levels for controlling the input of non-point source pollutants which require broad changes in sewage and waste management, agricultural practices, mining, construction and transportation.	*
N	J. Taken steps to control and prevent coastal erosion and siltation due to anthropogenic factors related to, inter alia, land-use and construction techniques and practices.	N

TABLE V. ADDRESSING CRITICAL UNCERTAINTIES FOR THE MANAGEMENT OF THE MARINE ENVIRONMENT AND CLIMATE CHANGE. IN ORDER TO IMPLEMENT THIS PROGRAMME AREA THE GOVERNMENT IS CARRYING OUT THE FOLLOWING ACTIVITIES:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
*	A. Coordinating national and regional observation programmes for coastal and near-shore phenomena related to climate change and for research parameters essential for marine and coastal management in all regions.	O
**	B. Providing improved forecasts of marine conditions for the safety of inhabitants of coastal areas and for the efficiency of marine operations.	**
*	C. Adopting special measures to cope with and adapt to potential climate change and sea-level rise.	O
*	D. Participating in coastal vulnerability assessment, modelling and response strategies particularly for priority areas, such as small islands and low-lying and critical coastal areas.	*
N	E. Identifying ongoing and planned programmes os systematic observation of the marine environment, with a view to integrating activities and establishing priorities to address critical uncertainties for oceans and all seas.	N
N	F. Research to determine the marine biological effects of increased levels of ultraviolet rays due to the depletion of the stratospheric ozone layer.	N
*	G. Carrying out analysis, assessments and systematic observation of the role of oceans as a carbon sink.	O

TABLE VI. RATING OF ACTIVITIES IN THE AIR AND MARITIME TRANSPORT SECTORS IN THE SMALL ISLANDS DEVELOPING STATES (SIDS)

AIR TRANSPORT	RATING	MARITIME TRANSPORT	RATING
1. Frequency (external flights)		1. Frequency (external shipping)	
2. Frequency (in-country flights)		2. Frequency (in-country shipping)	
3. Cooperation at regional level in air transport and civil aviation		3. Cooperation at regional level in shipping	
4. Cooperation at international level		4. Cooperation at international level	
5. Economic viability of national air line		5. Economic viability of national shipping line(s)	
6. Economic viability of regional air line		6. Economic viability of regional shipping line (s)	
7. national level training in skills for air transport sector		7. National level training in skills for maritime transport sector	
8. Access to training in skills for air transport sector within the region		8. Regional level training in skills for maritime transport sector	
9. Access to international training for air transport sector		9. Access to international training for maritime transport sector	
10. Supportive of ICAO			

AGENDA 21 CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

NATIONAL PRIORITY:

STATUS REPORT: Several relevant plans and programmes have been elaborated during recent years in Estonia to implement the Declaration on the Protection of the Marine Environment of the Baltic Sea, (1988); meet Helsinki Commission recommendations; improve water quality of the Baltic Sea and inland water bodies; and supply the population with high quality drinking water.

The Estonia Water Management Development Plan is a document in which general principles and goals of water protection and water supply are formulated.

Concrete measures to fulfill international obligations and internal water policy goals are defined in the Estonian Water Protection Programme for the years 1995-1998. Based on this programme, detailed Water Protection Programmes for each year have been elaborated. The programmes contain investment plans for the construction and reconstruction of waste water treatment plants, sewerage systems and drinking water supply systems, as well as plans for financing applied research and the elaboration of legislation concerning water management.

It is estimated that investments on a scale of approximately 100 MECU are needed for solving water management problems in Estonia. At present, only 1/3 of these needed finances are guaranteed by allocations from budgets, loan agreements, assistance from foreign countries, and PHARE.

Through the Water Protection Programme, the construction and reconstruction of 54 wastewater treatment and drinking water supply projects were financed in 1996. Of main importance were projects that included investments in Tallinn, Tartu and Haapsalu water management systems and small municipal projects. The main domestic sources of financing include the state budget (5.4 MECU), Environmental Fund (1.4 MECU) and local budgets (ca 7 MECU). Of foreign sources, loans from the World Bank and IBRD, assistance from Finland, Sweden, Denmark, Germany, Switzerland, Norway, NEFCO and PHARE must be emphasized.

Although the Estonian Water Protection Programme for the 1995-1998 period is not completely financed at this time, it is expected that in 1988, almost all Estonian towns with a population over 10,000, can meet the requirements of HELCOM recommendation 9/2 concerning BOD_7 (<15 mg/l) and phosphorus (<1.5 mg/l).

Assuming that the Water Protection Programme will be more or less successfully implemented and taking into account the remarkable decrease in water consumption and pollution from municipalities, industries and agriculture (due to decrease of production and reorganization of economy), it is expected that Estonia can generally meet the 50% reduction goal of Ministerial Declaration 1988.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of Environment is the body mainly responsible for issues related to freshwater resources.

2. Capacity-Building/Technology Issues: No information

3. Major Groups: No information

4. Finance: Approximately US$ 30 million is needed per year for the qualitative modernization of Estonian water management. Domestic funds include the state budget, the Environmental Fund, and local budgets. Of foreign sources, loans from the World Bank and IBRD, and assistance from Finland, Sweden, Denmark, Germany, Switzerland, Norway, NEFCO and PHARE are all important. According to preliminary negotiations, the purchase of water measurement equipment will be financed through EU PHARE funds.

5. Regional/International Cooperation: Estonia was the first of the newly independent Baltic states which acceded to the Baltic Sea Convention (signed originally in 1974) which was revised in 1992. Estonian scientists have regularly participated in the technical activities of the Helsinki Commission (HELCOM) since 1974. Estonia has cooperated in fulfilling its responsibilities regarding joint decisions made in the Convention.

STATISTICAL DATA/INDICATORS

	1980	1990	1995	
Fresh water availability (total domestic/external in million m^3)		11,700	11,700	
Annual withdrawal of freshwater as % of available water		28	16	
Other data				

AGENDA 21 CHAPTER 19: **ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS**

NATIONAL PRIORITY:	
STATUS REPORT:	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 20: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS WASTES, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN HAZARDOUS WASTES

NATIONAL PRIORITY:

STATUS REPORT:

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

Parties shall cooperate to disseminate information on transboundary movement of hazardous wastes. Parties shall cooperate to promote environmentally sound low-waste technologies, to transfer technology and cooperate in developing codes of practice. Parties to assist developing countries.

Parties shall immediately inform affected parties as to accidents. Prior to the end of each calendar year, parties shall provide the following information on the preceding calendar year: (a) the authorities handling Convention matters; (b) information regarding the transboundary movement of hazardous wastes; (c) measures adopted to implement convention; (d) available statistics on human health and environmental effects of generation, transport and disposal of hazardous wastes; (e) information on agreements entered into; (f) information on accidents; (g) information on disposal options; and (h) information on development of waste-reduction technologies;

- Basel Convention [☑] signed in 1992 [☑] ratified after 1 July 1992
- The latest information was provided to the Basel Convention Secretariat in 1995.

Additional comments relevant to this chapter

Annual waste generation in Estonia (according to data registered in 1995) was 13.4 million tons. Of this sum, approximately 7.3 million tons can be characterized as hazardous waste. The greatest amount of wastes are generated in oil-shale mining, chemistry and oil-shale based power production activities. At present, there are very few specialized hazardous waste treatment facilities in Estonia. In the absence of treatment facilities, the majority of hazardous wastes is deposited in special repositories or disposed of in common domestic waste landfills. The Ministry of Environment, in cooperation with Denmark and EU-PHARE Cross Border Cooperation Programme, is currently implementing the first phase of establishing a nation-wide system for collection, transport, treatment and final disposal of hazardous waste.

In recent years, a number of companies have been established whose main activity is the disposal of hazardous waste. Currently, they are able to treat only small amounts of the waste generated. Annual limits for waste deposits are established for enterprises with waste permits issued by local environmental authorities. The classification of hazardous wastes is based on the Estonian Waste Classifier (1991), the International Waste Identification Code (IWIC), and on the principles used for waste identification according to the Basel Convention. Using this system, the Ministry of Environment has begun to cooperate with the State Statistics Board to collect information on waste generation, treatment and disposal.

The inventory of contaminated sites in former Soviet military areas has been carried out in order to identify measures required for their clean up.

Cross-Sectoral Issues

1. Decision-Making Structure: The Ministry of Environment is responsible for issues related to hazardous waste. The main legislative document is the Waste Act (1992). In this Act, principles of waste prevention, minimization and source reduction are determined. Several lower-level regulative acts have been issued as regulations of the Government or of the Ministry of the Environment, e.g.: the Estonian Waste Classifier (1991); On Issuing of Licenses for Handling of Hazardous Waste (1992); On Issuing of Waste Permits (1992); On Labelling of Hazardous Waste (1992); and On Export, Import and Transit Movements of Hazardous and Other Waste (1992).

2. Capacity-Building/Technology Issues: Existing education and training systems in the field of hazardous waste management are insufficient. The establishment of centers providing training and information on environmentally sound technologies and hazardous waste management will be necessary in the near future.

3. Major Groups: Larger industrial enterprises are encouraged to treat, recycle, re-use and/or dispose of their wastes, at the source.

4. Finance: Economic regulatory incentives have been implemented to stimulate waste minimization, re-use and recycling. The Government of Estonia has established special fees for waste disposal and rates, depending on the degree of hazard. The fees paid by companies are directed to the Environmental Fund and used as financial resources for investments, research and implementation programmes in the field of waste management.

5. Regional/International Cooperation: Estonia ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal in 1992, and the Convention came into force in the same year. Estonia participates in international cooperation within the framework of the Basel Convention, and takes part in the preparation of technical guidelines for environmentally sound management of hazardous wastes with UNEP.

STATISTICAL DATA/INDICATORS

	1980	1992	1995
Generation of hazardous waste (1000 t)		9,600*	7,273
Import of hazardous wastes (t)			-
Export of hazardous wastes (t)			2,094
Area of land contaminated by hazardous waste (km^2)			
Expenditure on hazardous waste treatment (US$)			

* National Information of Estonia to the CSD 1994

AGENDA 21 CHAPTER 21: ENVIRONMENTALLY SOUND MANAGEMENT OF SOLID WASTES AND SEWAGE-RELATED ISSUES

NATIONAL PRIORITY:

STATUS REPORT: Solid household wastes, including commercial waste, street sweepings, construction debris etc., form a relatively small part of total waste generated annually in Estonia. Approximately 533 thousand tons of solid waste were disposed of in 1995 by waste collection and transportation companies in landfills and waste deposit sites. Waste-related services organized by municipalities and private companies cover areas with a population of about 900,000 people, approximately 60% of the population.

The main means of handling municipal waste is disposal at landfills. There are no facilities for incinerating or composting domestic waste. According to the inventory of landfills in 1995, there were 279 functioning municipal landfills in Estonia, most of them in rural areas. The majority of rural landfills are small, insufficiently managed and often do not meet environmental quality criteria. New landfills for the biggest cities (Tallinn, Tartu, Pärnu, Jõhvi) are planned to be designed and constructed according to international environmental criteria. For this purpose, new guidelines and standards will be introduced in accordance with European Union legislation. To encourage use of recyclable materials, particularly packaging materials and wastes, the Packaging Act has been approved by the Riigikogu (Parliament) in 1995.

In order to promote waste minimization technologies and procedures, programmes for some industries are being developed and implemented in cooperation with experts from the USA and Denmark.

One of the Government's main goals is to extend and improve waste collection and transportation systems. Privatization processes in Estonia are having an impact in this area. Privatization will promote the application of the Polluter Pays Principle in waste management through the establishment of service charge rates which will ensure that generators of waste cover the full cost of their disposal in an environmentally sound manner. Due to economic constraints, currently some companies, as well as a part of population, cannot afford to pay the full-scale costs of waste disposal.

Cross-Sectoral Issues

1. **Decision-Making Structure:** The decision-making structure, legislative framework and general policies in the area of solid waste correspond to those of hazardous waste discussed in chapter 20.

2. **Capacity-Building/Technology Issues:** No information

3. **Major Groups:** Companies have an important role in the management and minimization of solid waste.

4. **Finance:** Please refer to "Status" above

5. **Regional/International Cooperation:** International partners in the field of Estonia's waste management are the countries of Baltic region, mainly Denmark and Finland.

STATISTICAL DATA/INDICATORS

	1980	1992	1995	
Generation of municipal waste (1000 t)		465*	533	
Waste disposed(Kg/capita)			355	
Expenditure on waste collection and treatment (US$)				
Waste recycling rates (%)				
Municipal waste disposal (Kg/capita)			355	
Waste reduction rates per unit of GDP (t/year)				

* National Information of Estonia to the CSD 1994

In 1995, 60% of population were covered by municipal waste services.

AGENDA 21 CHAPTER 22: SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

NATIONAL PRIORITY:	High	

STATUS REPORT: There are currently two sites for the management and storage of radioactive wastes in Estonia. One was established for low and intermediate level waste at Tammiku, 12km south from Tallinn. It used to serve as a central treatment and storage facility for the radioactive waste in Estonia. The Tammiku facility was designed in accordance with criteria developed in Moscow in the end of the 1950s. Approximately 55% of the vault's capacity is presently occupied. The other is situated at the former Soviet Navy training centre at Paldiski, 45 km WNW from Tallinn. There are two storage facilities for radioactive waste at the site, one for liquid and another for solid waste. The storage of radioactive wastes at the Paldiski facility is now performed by using concrete containers from Sweden.

Though Estonia is a non-nuclear country, because of uranium processing at Sillamäe, there is a large uranium milling tailings depository. Geotechnical investigations of the depository have shown that the dam's stability does not meet international requirements. Initiatives are being taken to strengthen the dam.

In the near future, the Government intends to close the Tammiku facility and to store the radioactive waste at the Paldiski facility exclusively.

Cross-Sectoral Issues

1. Decision-Making Structure: The operating authority in Estonia for the storage of radioactive waste is ALARA Ltd., while the controlling authority is the Estonian Radiation Protection Centre.

2. Capacity-Building/Technology Issues:

3. Major Groups:

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTERS 23-32: MAJOR GROUPS

The role of major groups are also covered under the various chapters of Agenda 21. The following is a summary of main objectives outlined in Agenda 21. Please check the appropriate boxes and describe briefly any important steps or obstacles.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 24: GLOBAL ACTION FOR WOMEN TOWARDS SUSTAINABLE AND EQUITABLE DEVELOPMENT.
The Convention on the Elimination of All Forms of Discrimination Against Women was

☑ signed on 20 November 1991
Date

☑ accession on 21 October 1991
Date

24.b Increasing the proportion of women decision makers.

Percentage of women:	**1992**	**1996**
in government %	22%	-
in parliament %	11%	11%
at local government level %	20.7%	-

24.2.e assessing, reviewing, revising and implementing curricula and other educational material with a view to promoting dissemination of gender-relevant knowledge.
Curricula and educational material

☑ already promote gender relevant knowledge ☐ is being revised ☐ No action yet

24.2.f and 24.2.c formulating and implementing policies, guidelines, strategies and plans for achievement of equality in all aspects of society including issuing a strategy by year 2000 to eliminate obstacles to full participation of women in sustainable development. Policies/strategies etc. have been

☐ drawn up/ completed ☑ are being drawn up ☐ will be in place by 2000 ☐ no plans at present

24.2.d establishing mechanisms by 1995 to assess implementation and impact of development and environment policies and programmes on women

☐ Mechanisms are in place ☑ Mechanisms are being developed ☐ No plans at present

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Women took a very active part in political processes during the period of preparation for independence from 1988-1991. Movements such as the fight against mandatory conscription in the Soviet army had its start and ultimate realization due to the instigation of women's organizations.

The 1995 parliamentary elections demonstrated the worldwide tendency towards decreased numbers of women in higher decision-making bodies.

There is an established commission between various Estonian Ministries which deal with gender-related issues.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 25: CHILDREN AND YOUTH IN SUSTAINABLE DEVELOPMENT.

25.4 establishing processes that promote dialogue between the youth and government at all levels and mechanisms that permit youth access to information and opportunity to present their views on implementing A21.

Name relevant youth fora (3-4 most important):

1. Estonian Children Organisation
2. Ayfa Estonia
3. Forest Youth
4. Tartu Students Society for Nature

Describe their role in the national process: ☐ Full participants ☑ advisory ☐ Ad hoc

25.6 reducing youth unemployment

Youth unemployment 1992:_____ 1996: 3% (We have no exact statistics about it yet)

25.5 ensuring that by year 2000 more than 50% of youth -- gender balanced -- have access to appropriate secondary education or vocational training.

The goal set in Agenda 21:

☑ has been reached ☐ will be reached by year 2000 ☐ will be reached by year ------ ☐ No goal set yet nationally

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): There is no environmentally active youth organization at the moment in Estonia.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 26: RECOGNIZING AND STRENGTHENING THE ROLE OF INDIGENOUS PEOPLE AND THEIR COMMUNITIES.

26.3.a establishing a process to empower indigenous people and their communities -- through policies and legal instruments:

- [x] in place
- [ ] not in place

26.3.b strengthening arrangements for active participation in national policies

- [x] indigenous people participate fully in appropriate national processes
- [ ] indigenous people participate as advisors
- [ ] not relevant
- [ ] indigenous people participate on an ad hoc basis
- [ ] indigenous people do not yet participate

26.3.c involving indigenous people in resource management strategies and programmes at the national and local level.

- [x] indigenous people are fully involved
- [ ] mechanisms for involvement being discussed
- [ ] no action yet

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

Ch. 27: STRENGTHENING THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS: PARTNERS FOR SUSTAINABLE DEVELOPMENT.

27.5 developing mechanisms that allow NGOs to play their partnership role responsibly and effectively.
27.6 reviewing formal procedures and mechanisms to involve NGOs in decision making and implementation.
27.8 promoting and allowing NGOs to participate in the conception, establishment and evaluation of official mechanisms to review Agenda 21 implementation.

- [x] mechanisms exist already
- [ ] mechanism planned for 199-
- [x] NGOs are participating fully
- [ ] NGO inputs are important
- [ ] NGOs inputs are adhoc
- [ ] no significant NGO inputs

27.7 establishing a mutually productive dialogue by 1995 at the national level between NGOs and governments.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): There is mutually productive dialogue between NGOs and Government. An important role for implementing Agenda 21 is filled by the Estonian Green Movement and by the Stockholm Environmental Institute of Estonia Branch. These organizations are participating in the conception, establishment and evaluation of official mechanisms. They are also involved in the elaboration of a regional Agenda 21.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 28: LOCAL AUTHORITIES' INITIATIVES IN SUPPORT OF AGENDA 21.

28.2.d encouraging local authorities to implement and monitor programmes that aim to ensure participation of women and youth in local decision making.

There are at least ----- local agenda 21s. ----% involve representation of women and/or youth

They involve ----% of population

Government support of local agenda 21 initiatives:

- ☐ supports
- ☑ plans to support
- ☐ does not support

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

Ch. 29: STRENGTHENING THE ROLE OF WORKERS AND THEIR TRADE UNIONS.

29.2 full participation of workers in implementation and evaluation of A21.

29.3 a to e (By year 2000, (a) promoting ratification of ILO conventions; (b) establishing bipartite and tripartite mechanism on safety, health and sustainable development; (c) increasing number of environmental collective agreements; (d) reducing occupational accidents and injuries; (e) increasing workers' education and training efforts.

- ☑ ILO Conventions have been ratified
- ☐ will be ratified by year 2000
- ☐ Workers take full part in National Agenda 21 discussions/implementation
- ☑ Workers take some part in National Agenda 21 discussions/implementation
- ☐ Workers do not yet participate in National Agenda 21 discussions/implementation

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Estonia has ratified 21 conventions between 1922-1938 and 7 conventions between 1993-1996.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

30: STRENGTHENING THE ROLE OF BUSINESS AND INDUSTRY.

30.6 increasing the efficiency of resource use, including reuse, recycling, and reduction of waste per unit of economic output.

- [✓] There are governmental policies encouraging the above objective
- [✓] There are governmental policies requiring recycling etc.

30.18.a encouraging the concept of stewardship in management and use of natural resources by entrepreneurs.

List any actions taken in this area: One of the steps the Government has taken towards sustainable development is the use of economic instruments. The prices for the use of natural resources and pollution charge rates were raised pursuant to the rise of the consumer price index (by 1.417). All revenue collected from taxes and charges are allocated to the environmental fund.

30.18.b increasing number of enterprises that subscribe to and implement sustainable development policies.

- [ ] Most big enterprises have adopted sustainable development policies
  Number of enterprises (---------) or ---% of enterprises
- [ ] Several big enterprises have adopted sustainable development policies
  Number of enterprises (---------) or ---% of enterprises
- [✓] A few big enterprises have adopted sustainable development policies
  Number of enterprises (---------) or ---% of enterprises
- [ ] Most Small and Medium sized enterprises have adopted sustainable development policies
  Number of enterprises (---------) or ---% of enterprises
- [ ] Several Small and Medium sized enterprises have adopted sustainable development policies
  Number of enterprises (---------) or ---% of enterprises
- [✓] A few Small and Medium sized enterprises have adopted sustainable development policies
  Number of enterprises (---------) or ---% of enterprises

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): All of the enterprises that have to pay charges, revenues and taxes for the use of natural resources or for pollution have to act in a sustainable manner. Taxes and other charges will increase annually where the behaviour of enterprises has not improved. Where positive results for environmental protection have taken place, the tax burden decreases. Rates crease each year for those businesses that pay pollution charges, revenues and taxes.

Pollution charges are a complex indicator of pollution extent (range). According to this indicator, 80% of the total pollution volume in Estonia originates from twenty enterprises.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 31: SCIENTIFIC AND TECHNOLOGICAL COMMUNITY.

31.3.b improving exchange of knowledge and concerns between s&t community and the general public.

- [x] scientific community has already established ways in which to address the general public and deal with sustainable development
- [ ] there is some effort in this direction
  brief description:_____
- [ ] Not much has changed in this area

31.9 developing, improving and promoting international acceptance of codes of practice and guidelines related to science and technology and its role in reconciling environment and development.

Brief comments on this chapter not already described in chapter 35 (maximum 100 words) (please, do not exceed this page):

Ch. 32: STRENGTHENING THE ROLE OF FARMERS.

32.5.c promoting and encouraging sustainable farming practices and technologies.

32.5.e developing a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices.

32.5.f enhancing participation of organizations of farmers in design and implementation of sustainable development policies.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Government policies are promoting and encouraging sustainable practices and technologies.

In cooperation with the Board of Education, the Ministry of Environment prepared teaching materials for environmental education and organized a seminar on water protection problems in agriculture for the teachers of agricultural schools.

AGENDA 21 CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Financial resources and mechanisms are also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national financial policies, domestic and external (including ODA)

NATIONAL PRIORITY:

STATUS REPORT:

CHANGES IN NATIONAL BUDGET TO ADDRESS SUSTAINABLE DEVELOPMENT: The Estonian Ministry of Environment receives 222,6 mil. EEK (Estonian Kroons) from the national budget for the implementation of policies and strategies for nature protection and sustainable development.

NEW ECONOMIC INSTRUMENTS: Pollution charges and resource taxes are the most important economic instruments used for promoting sustainable development.

Eight percent of state investment programmes supports local environmental infrastructure for the building and reconstruction of various environmentally important developments.

ELIMINATION OF ENVIRONMENTALLY UNFRIENDLY SUBSIDIES:

ODA policy issues

☐ donor country ☐ Recipient

STATISTICAL DATA/INDICATORS						
	1992	1993	1994	1995	1996	
ODA funding provided or received (Total US$million)						
	Average for 92-93		Average for 94-96			
Net flow of external capital from all sources as % of GDP						
Other data						

AGENDA 21 CHAPTER 34: TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Transfer of environmentally sound technology, cooperation and capacity-building is also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national policies and actions relating to chapter 34.

NATIONAL PRIORITY:	Sustainable Development	
STATUS REPORT ON LINKS BETWEEN NATIONAL, REGIONAL AND INTERNATIONAL INFORMATION NETWORKS/SYSTEMS:		

• Describe any work being undertaken at the national or local level regarding efforts to promote clean production processes and/or the concepts of eco-efficiency. These processes may include training, preferential financial arrangements, information dissemination and changes in legal or regulatory frameworks.

The Package Law, issued on 3 May 1995, prescribes the implementation of Estonian third-party certified environmental labels, which will be established in the end of 1996. The main goal of this law is the propagation of environmental labelling among producers and customers, as well as training the label jury and criteria commission for European eco-labelling strategies. There have been some cases of *ad hoc* environmental labelling in Estonia, mainly in the field of soft agriculture. In order to promote environmentally friendly tourism, the Hiiumaa Green Label was established by the Hiiumaa Centre of the West-Estonian Archipelago Biosphere Reserve.

• Provide information on the adoption of environmental management systems. National reaction to environmental management system standards such as the ISO 14000 Series and others. Please note efforts made at the national level to promote their adoption and the creation of certification infrastructure in order to facilitate access to these standards to local industry.

A few enterprises, notably small subsidiaries of large foreign firms (e.g., SADOLIN), have begun to adopt environmental management systems. Environmental management system standards ISO 14001: 1996 and ISO 14004:1996 will be adopted by the Estonian Standardization Board (EVS) at the end of 1996. The adoption of EIA and the Environmental Auditing Act by Parliament is expected to take place at the beginning of 1997. Estonia has translated the first ISO auditing standards ISO 14010:1996, ISO 14011:1996 and ISO 14012:1996 and intends to implement these standards in the beginning of 1997. A training program for environmental auditors has begun. The accreditation of certification bodies is provided by EVS according to the Minister of Finance's Regulation No. 45 (25 February 1994) based on the working document CEN/CLS TC 1/WG 2 N17 "General criteria for the assessment of certification bodies" and on the CEN standard EN 45002.

• List and describe programs or work under way to facilitate the transfer of ESTs to small and medium sized enterprises. Please note efforts to facilitate access to financial resources and other transfer strategies.

AGENDA 21 CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT ON NATIONAL SCIENTIFIC KNOWLEDGE, RESEARCH NEEDS AND PRIORITIES: Estonia is currently undertaking reform in the area of higher education and research - the primary aim of which is to restructure research and technological development and raise the international competitiveness of Estonian higher education and research. The research is mostly state-funded, non-military, and concentrated in universities and research institutions and entails basic and applied research. The specific priorities of the ongoing reform are: develop a national innovation system for Estonia's economic growth; increase cooperation between institutions of higher education and research and private enterprise in order to support greater sharing of technology and the transfer of know-how; improve the quality of teaching and research; and establish the foundation of an information and knowledge-based society.

STEPS TAKEN TO ENHANCE SCIENTIFIC UNDERSTANDING, IMPROVE LONG TERM SCIENTIFIC ASSESSMENT, BUILDING OF CAPACITY AND CAPABILITY: There are five different types of research and development funding by the state: 1) the Ministry of Education supports infrastructure expenditures (administration, heating, etc.) for the state research institutions; 2) the Estonian Science Foundation allocates research grants and general purpose financing; 3) research grants are allocated on the basis of the research projects submitted in an open contest; 4) research and development carried out within the framework of state and ministerial programmes is financed separately; 5) the Innovation Foundation supports mainly development projects.

A decision was made recently to increase state investments in technological development activities and to encourage the generation of additional resources for research and development from the private and foreign sectors.

STATISTICAL DATA/INDICATORS

		Year	
Number of scientists, engineers and technicians engaged in research and experimental development	#	19--	
Total expenditure for research and experimental development (US$eq.)	$	19--	

Other data

Number of scientists, engineers and technicians engaged in research 1992-1994 by field of science

Field	year 1994
Natural sciences	1535
Engineering	863
Medical sciences	545
Agricultural sciences	462
Social sciences	718
Humanities	956

Research funding from state budget in 1996:

Allocation	Amount ($, millions)
Infrastructure	2,8
General purpose allocation	7,8
Research support	4,9
Ministry studies (development programmes)	3,3
Development support through Innovation Foundation	1,1

Gross Government expenditure on research

YEAR	Amount ($, millions)	ratio to GDP
1992	7,4	-
1993	8,3	0.45
1994	13,8	0.55

AGENDA 21 CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

NATIONAL PRIORITY:

STATUS REPORT:

a) Reorientation of education towards sustainable development: Of the four compulsory cross-curricular themes in the Estonian National Curriculum for Primary and Secondary Schools, Environmental Education is one. In the field of environmental education, the Government exercises continuous cooperation with basic and vocational schools, as well as with Universities.

A new national curriculum will be implemented from year 1997 in grades 1,4,7 and 10. Subsequent curricula have been compiled incorporating the elements of environmental education. Each school is required to develop its own school curriculum. Environmental education is learned as a part of core subjects through cross-curricular activities and, if the school chooses to do so, through optional courses. Four different curriculum materials of environmental education have been compiled for different levels of education. These materials were made available to schools for free.

b) Increasing public awareness: Raising public environmental awareness and shaping an environmentally friendly consumer is one of the priorities of the national environmental strategy. Environmental issues are discussed in newspaper, TV and radio broadcasts. Today, there seems to be less interest in environmental improvement due to pressing economic concerns, than before UNCED.

c) Promoting training: In 1995, support was offered to promote environmental education in biology classes at the Estonian Youth Hobby Centre Telo and Rapina Higher Horticultural School. A meeting of young geologists has also taken place in addition to a countrywide olympiad in biology and Environ-Tallinn Nature Conservation Society.

Training has been carried out mainly through the Ministry of the Environment and the Ministry of Education. The Ministry of Education is responsible for pre- and in-service training of teachers. There are three Nature Hobby Centers in Estonia offering in-service training courses for teachers and which coordinate after-school environmental education activities for students.

ROLE OF MAJOR GROUPS:

FINANCING AND COST EVALUATION OF THE LABOUR ACTIVITIES: The Estonian Environmental Fund awarded scholarships to the students of the environmental protection technology and environmental engineering branches of Tallinn Technical University. The University of Turku (Finland) and the Institute of Zoology and Hydrobiology of the Tartu University in Vilsandi National Park have received financial support from the Government.

STATISTICAL DATA/INDICATORS				
	1980	1989	Latest 199-	
Adult literacy rate (%) Male		99.9		
Adult literacy rate (%) Female		99.6		
% of primary school children reaching grade 5 (1986-97)		93		
Mean number of years of schooling*			90%	
% of GNP spent on education			5.0(1994)	
Females per 100 males in secondary school		104[a]	113	
Women per 100 men in the labour force				

[a] 1992

* During the last two years, 90% of young people have received secondary school diplomas.

AGENDA 21 CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

National capacity building is also covered under sectoral chapters.
Donors: You may wish to describe here how Agenda 21 has influenced your ODA policies in this area.
Developing countries: You may wish to describe any new national mechanisms for capacity building - and any changes in technical cooperation.

NATIONAL PRIORITY:	
STATUS REPORT ON NATIONAL ENDOGENOUS CAPACITY BUILDING:	

AGENDA 21 CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

Ch. 38: Brief summary of any particular UN System response affecting this country/state:	

AGENDA 21 CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

Ch. 39: International Legal Instruments are covered under the relevant sectoral chapters. This is a listing of major agreements/conventions (not already covered) entered into and relevant to Agenda 21:

Conventions ratified by Parliament are as follows:

- Basel (1989) Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (ratified on May 14th),
- Gdansk (1973) Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts (rat. on February 10th, 1993),
- Ottawa (1978) Convention on Future Multilateral Co-operation in the North-West Atlantic Fisheries (rat. on Feb. 10th, 1993),
- Copenhagen (1964) Convention on International Council for the Exploration of the Sea (rat. on Feb. 10th, 1993),
- Ramsar (1971) Convention on Wetlands of International Importance Especially as Waterfowl Habitat (rat. on October 20th),
- Washington (1973) Convention on International Trade in Endangered Species of Wild Fauna and Flora (rat. on Oct. 20th, 1993),
- Vienna (1963) Convention on Civil Liability for Nuclear Damages (rat. on April 6th, 1994),
- Joint protocol (1988) relating to the application of the Vienna Convention and the Paris Convention (rat. on April 6th 1994),
- Rio de Janeiro (1992) Convention on Biodiversity (rat. on May 11th, 1994),
- New York (1992) UN Framework Convention on Climate Changes (rat. on May 11th, 1994),
- Hensinki (1992) Convention on the Protection and Use of Transboundary Watercourses and International Lakes (rat. on May 3rd, 1995).

Other environmental convention in force in Estonia are as follows:

- Berne (1979) Conservation on Conservation of European Wildlife and Natural Habitats (entered into force in Estonia on August 3rd, 1992),
- London (1973) Convention on Prevention of Pollution from Ships (entered into force in Estonia on March 16th, 1992) and its supplementary protocol (MARPOL 1973/78) and Annexes I - V (Annexes I and II entered into force in Estonia on March 16th, 1992, Annexes III - V on November 18th, 1992),
- Brussels (1969) Convention on Civil Liability for Oil-pollution Damage (entered into force in Estonia on March 1st, 1993),
- Brussels (1971) Convention on Establishment of an International Fund for Compensation for Oil-pollution Damage (entered into force in Estonia on March 1st, 1993),

The following convention has been signed by Estonia:

- Helsinki (1992) Convention on the Transboundary Effects of Industrial Accidents.

AGENDA 21 CHAPTER 40: INFORMATION FOR DECISION-MAKING

This chapter is also covered under sectoral and other chapters of this profile. The matrix below gives an overview of how national authorities rate the available information for decision making.

Rating of available data and information suitable for decision-making

	Agenda 21 Chapters	Very good	Good	Some good data but many gaps	Poor	Remarks
2.	International cooperation and trade			✓		
3.	Combating poverty			✓		
4.	Changing consumption patterns		✓			
5.	Demographic dynamics and sustainability		✓			
6.	Human health		✓			
7.	Human settlements			✓		
8.	Integrating E & D in decision-making			✓		
9.	Protection of the atmosphere		✓			
10.	Integrated planning and management of land resources			✓		
11.	Combating deforestation			✓		
12.	Combating desertification and drought			✓		
13.	Sustainable mountain development			✓		
14.	Sustainable agriculture and rural development			✓		
15.	Conservation of biological diversity		✓			
16.	Biotechnology				✓	
17.	Oceans, seas, coastal areas and their living resources			✓		
18.	Freshwater resources		✓			
19.	Toxic chemicals			✓		
20.	Hazardous wastes		✓			
21.	Solid wastes		✓			
22.	Radioactive wastes		✓			
24.	Women in sustainable development				✓	
25.	Children and youth				✓	
26.	Indigenous people			✓		
27.	Non-governmental organizations		✓			
28.	Local authorities		✓			
29.	Workers and trade unions			✓		
30.	Business and industry			✓		
31.	Scientific and technological community			✓		
32.	Farmers				✓	
33.	Financial resources and mechanisms				✓	
34.	Technology, cooperation and capacity-building				✓	
35.	Science for sustainable development				✓	
36.	Education, public awareness and training		✓			
37.	International cooperation for capacity-building			✓		
38.	International institutional arrangements			✓		
39.	International legal instruments			✓		
40.	Information for decision-making			✓		

Additional Comments

STATISTICAL DATA/INDICATORS

	1989	1993	Latest 199-
Number of telephones in use per 100 inhabitants	19.7	23.2	

Other data